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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/433,161	11/03/99	FATTMAN	G CV-0277A

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EXAMINER

WYROZEBSKI, K

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 10/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/433,161

Applicant(s)
Fattman

Examiner
Katarzyna Wyrozebski

Group Art Unit
1714



- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-23 _____ is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-23 _____ is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1714

DETAILED ACTION

Claim Rejections - 35 U.S.C. § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is considered indefinite, since it is not clear exactly as to what is the lower range of the plasticizer.

With respect to the claim 2, the applicant claims ethylene-propylene copolymer having broad molecular weight distribution. The term broad molecular weight distribution renders claim indefinite since it is not clear as to which type of molecular weight the applicant is referring to.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1714

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1 and 5-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (U.S. 5,169,706) in view of Sorensen (U.S. 4,231,369).

The prior art of Collier discloses an elastic composition which is utilized to form articles which can be used in the medical field in disposable diapers wherein the addition of the tackifying agent will alter its characteristics and its function so that it can be used as pressure sensitive adhesive (col. 10, lines 14-18). The components of the composition of Collier include 50 to 80 % of the styrene block copolymers, 15-28 % of tackifying agent, 3-23 % of the polyolefin and 0-15 % of extending oil. Although the range of the styrene block copolymers in the specification of the prior art of Collier is high, the examples disclosed enable one to utilize the amounts as low as 23.3 % of styrene -poly(ethylene-propylene)-styrene block copolymer and 35% of KRATON and since

Art Unit: 1714

the language of the present claims is open the composition can contain additional polymers as well (see Example 6) therefore the amounts of the resins satisfy the requirements of claims 1 a-c, g, i and j; 16 a, c, d, f, h-j as well as 20 a, b, c and f-g. The tackifying resin in the disclosure of Collier includes hydrogenated hydrocarbon resin and other agents which are disclosed in the prior art U.S. 4,789,699 and U.S. 4,294,936 which are also incorporated herein by reference (col. 10, lines 20-30). Tackifying agents disclosed in these two references include various rosins, esters of hydrogenated rosins, modified rosins (col. 5, lines 11-20 of '936) or terpenes (col. 10, line 63-65 of '699). The polyolefins which can be utilized in the disclosure of Collier include polyethylene, polypropylene, polybutylene as well as their copolymers where the copolymers of ethylene and propylene are also known as EP rubbers. Although the article of the prior art of Collier contains hydrocolloid, these are not part of the adhesive composition.

The difference between the present claims and the prior art of Collier is utilizing of the hydrocolloid in the pressure adhesive composition.

With respect to the above difference, Sorensen discloses another composition which has adhesive properties and which can be utilized as a sealing material for the ostomy device. The components of the composition also include elastomeric components such as styrene block copolymers or ethylene-propylene block polymers (col. 5, lines 8-68) which are the same types of the elastomers utilized in the prior art of Collier as well as hydrocarbon tackifiers. Of interest however, are the colloids which can be utilized with the elastomeric components of the adhesive composition. These hydrocolloid include sodium carboxymethyl cellulose and pectin as well as

Application: 09/433,161

Art Unit: 1714

hydrophilic polymers, gelatin, gums and the like which can also be utilized in mixture of at least two (col. 7, lines 24-38). The amount in which these hydrocolloid can be utilized in ranges from 20 to 80 % (col. 8, lines 8-14) wherein the amount of elastomers would be 4-15%, the amount of the tackifier 5-50% and the amount of the extender oil 0-50%. Antioxidant which can be added to composition is utilized in small amounts not exceeding 2% which further satisfies the requirements of claims 1 d-f, i, 16 b, e and 20 d. The prior art of both Collier and Sorensen disclose addition of the extender oils such as paraffinic oils (col. 6, lines 22-39) although this component is disclosed not as a plasticizers, oils such as those in the prior art of Sorensen can be used to plasticize the composition. Which further completes the requirement of claims 1, 16 and 20 e of the present invention since the prior art of Sorensen enables one to utilized the oil in the amount as low as 5.6% (ground nut oil) or 11.1% (paraffin) see Table III in col. 12-13. Since the amounts of the components of the adhesive composition in the prior art disclosed is in the same ranges as those of the present invention, the properties which characterize the composition of the present invention would become inherent. The addition of the tackifying resin which is within the scope of the claim will control the tack property of the composition and therefore its adhesion which are required by claims 1, 5, 12, 15, 17, 21 of the present invention. Addition of hydrocolloid is also within the scope of the present claims and such component can control the absorbency of the composition which is required by the claims 6-8, 13, 18 and 22 of the present invention. The addition of the plasticizers also within the range claimed in present claims gives

Application: 09/433,161

Art Unit: 1714

the composition its tensile strength which is required by claims 9-11, 14, 19 and 23 of the present invention.

Adhesive compositions which utilize elastomers have been utilized for some time. Depending on the desired of the composition one can alter the components and their amount. For example, if the adhesive is to serve the purpose of the fastening a diaper on the baby or securing the sanitary napkin to the undergarment components such as hydrocolloid are not necessary, however, if the same composition is utilized in the ostomy device hydrocolloid become an important component due to their absorbing abilities.

In the light of the above disclosure, it would have been obvious to one with the ordinary skill in the art at the time of the instant invention to utilize the hydrocolloid in the elastomeric adhesive such as that of Sorensen and incorporate them into the composition of Collier in order to provide the composition which ability to absorb body fluids.

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (U.S. 5,169,706) in view of Sorensen (U.S. 4,231,369) as applied to claims 1 and 5-23 above, and further in view of Cameron (U.S. 6,120,899)

The discussion of the prior art of Collier and Sorensen from paragraph 5 of this office action is incorporated here by reference.

Application: 09/433,161

Art Unit: 1714

The difference between the present claims and the prior art of Collier and Sorensen is showing that the ethylene-propylene copolymer utilized in the adhesive composition can be amorphous with broad molecular distribution and amount of ethylene of 50% or less.

With respect to the above difference, the prior art of Cameron discloses composition for pressure sensitive hot melt adhesive and method for pelletizing such composition. Regardless of what the method for pelletizing of the composition is, the point of interest is the actual composition. After description of the additives such as tackifiers, additives (col. 14, lines 59-64) or antimicrobials (col. 13, lines 1-3) the thermoplastic polymers which can be utilized include block polymers, homopolymers copolymers of C2-C8 alphaolefins (col. 15, lines 1-9) with styrene derivatives (see col. 15 and 16). Another component includes amorphous polyolefins where ethylene can be polymerized with another alpha-olefin having up to 8 carbon atoms. Such alpha-olefin includes propylene. The alpha-olefin polymers are formed utilizing Ziegler-Natta chemistry where the alpha-olefin content is greater than 50%, which would signify that in the ethylene copolymers the ethylene content will be the difference which is 50% or less (col. 16, lines 50-51) which satisfies the requirements of claims 3 and 4 of the present invention. The resulting amorphous have also relatively broad molecular weight range which further satisfies the requirements of claim 2 of the present invention (col. 16, lines 24-26).

Amorphous polyolefins such as ethylene-propylene copolymers also add to the composition tackiness. Their use in pressure sensitive adhesives, regardless of the substrate has been known for sometime.

Application: 09/433,161

Art Unit: 1714

In the light of the above disclosure it would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize ethylene-propylene copolymers as disclosed in the prior art of Cameron in the composition disclosed in the prior art of Collier and Sorensen since all prior art applications disclose pressure sensitive adhesives containing elastomeric compounds such as Kraton and ethylene-propylene copolymers.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna I. Wyrozebski-Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Monday through Thursday from 7:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached at (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Katarzyna I. Wyrozebski-Lee

October 3, 2000

EDWARD J. CAIN
PRIMARY EXAMINER
GROUP 1500

